**IN THE SPECIFICATION:**

Change the title to read:

METHOD FOR SQUEEZING OFF AND SEALING A TUBE

Page 1, lines 5-9:

The invention refers to a process for ~~consolidating~~ squeezing off and sealing a tube, particularly a metal tube intended for example for a cooling device, wherein the tube is positioned between a sonotrode and an associated counter electrode such as an anvil of an ultrasonic welding device and the sonotrode is activated and displaced in relation to the counter electrode for ~~consolidating~~ squeezing off and sealing the tube.

Page 2, lines 25-27:

It is the object of the present invention to advance a procedure of the kind mentioned above such that an automated ~~consolidating~~ squeezing off and sealing of a tube can be carried out, without previously entering the tube data individually into an ultrasonic welding device.

Page 4, lines 24, 31, rewrite as follows:

In particular, the invention is characterized in that the control curves are associated with welding parameters such as pressure duration, welding duration or energy input, which are determined for ~~consolidating~~ squeezing off and welding standard tubes used during the recordation of the control curves, in that for welding a tube with an unknown size, an actual curve is recorded and the actual curve is fit into one of several control curves, and in that the tube of unknown size is consolidated and welded based on the welding parameters associated with the corresponding control curve.

Page 5, lines 11-15:

Fig. 1 illustrates a schematic construction of an ultrasonic welding machine comprising as essential components

a sonotrode 10, a converter 12, as well as a control unit ~~14~~ 13. In the embodiment, a booster 14 is arranged between the sonotrode 10 and converter 12, serving as an amplitude transformer to achieve a desired amplitude range and for general stabilization of the vibration behavior inside the vibration system.

lines 25-31:

The control unit ~~14~~ 13 is fed a system voltage by means of a connection 26, the frequency of which is converted to 20 kHz, for example. Thereafter, the converter 12 converts the electric energy into mechanical vibration energy, whereby the mechanical vibration frequency corresponds to the electrical frequency of the control unit 14. The booster 14 interposed between the sonotrode 10 and converter 12 serves, as previously mentioned, for the amplitude transformation between the converter 12 and sonotrode 10. The control unit ~~14~~ 13 is connected to the converter 12 by means of a control line 15.

Page 6, lines 1-14:

The quality of ~~consolidating~~ squeezing off and sealing the tube 24 is dependent on the amplitude of the sonotrode head 16, the welding pressure (operating pressure), the welding energy, the compression, as well as the welding time. According to the state of the art, the corresponding data is entered individually into the control unit ~~14~~ 13 as a function of the outside diameter, wall thickness and material of the tube 24, in order to then conduct the ~~consolidating~~ squeezing off and welding process and where applicable the cutting of the tube section by means of interaction between the sonotrode head 16 and anvil or counter electrode 22. According to the invention, it is now proposed that the control unit ~~14~~ 13 and/or a computer, which is not shown, stores a multitude of welding parameters, comprising, for example, the amplitude of the sonotrode 10 and/or working area 18, 20, the welding

pressure, the energy and the welding time, as well as the compression, as a function of the tubes to be consolidated and welded, meaning their diameters, wall thickness and materials, to mention a few characteristic variables by way of example.

Page 6, line 16- page 7, line 12:

After the tube 24 to be welded has been arranged between the anvil (second or counter electrode 22) and the first working area 18 of the sonotrode 10, and the sonotrode 10 has thereafter been lowered in the direction of the anvil or second electrode 22, namely the anvil, until the tube 24 is fixed between the ~~first~~ sonotrode 10 and the second ~~electrodes 10,~~ electrode 22, the distance between the sonotrode 10 and counter electrode 22 is determined in order to obtain the outside diameter of the tube 24. The distance may be recorded by means of a displacement transducer, whereby the corresponding data is fed to the control unit ~~14~~ 13 and/or the computer via a data line 28. In addition, characteristic material properties of the tube 24 can be determined and fed to the control unit ~~14~~ 13 and/or the computer also by means of the data line 28. Stability, electrical resistance or wall thickness, for example, are considered characteristic material values, which are determined after fixing the tube 24 between the sonotrode 10 and counter electrode 22 and/or their welding areas. Stability may be determined in that, after fixing the tube 24, the sonotrode 10 is displaced in the direction of the counter electrode 22 with a defined pressure. As a function of the displacement path, conclusions may be drawn about the material of tube 24. The electrical resistance of the tube 24 may be determined as well. With a sensor that is present, for example, in the area of the second counter electrode 22, the wall thickness of the tube 24 can be measured by means of ultrasound. Other suitable measuring methods are feasible as well.

Independently thereof, parameters stored in the control unit ~~14~~ 13 and/or computer on the basis of the characteristic variable of the tube 24 determined as described above by way of example, which parameters comprise, in particular, the amplitude of the sonotrode 10, the welding pressure, welding energy, compression and welding time, are retrieved in order to activate the sonotrode 10 accordingly and/or to displace it in the direction of the second or counter electrode 22, i.e. the anvil. The tube 24 is then consolidated to the required extent and sealed, i.e. welded. Shearing of the non-required tube section may be carried out at the same time.